

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application:

LISTING OF CLAIMS

1. (Currently Amended) A stent formed to be tubular as a whole, having a first outer diameter capable of insertion into a tubular lumen of a living body, and capable of expansion to have a second outer diameter larger than said first outer diameter when an expanding force directed outward in a radial direction is imparted within the stent, comprising a plurality of annular expanding members arranged a predetermined distance apart from each other in an axial direction of the stent and each formed of a waved element, each of the waved elements comprising an alternating arrangement of ridges and bottoms so that each ridge is circumferentially followed by one of the bottoms; and a plurality of waved connecting members connecting the ridges of axially adjacent wave elements to one another and connecting the bottoms of axially adjacent wave elements to one another ~~ridges and/or bottoms of the waved elements of adjacent annular expanding members~~; wherein said plurality of annular expanding members are arranged in an axial direction of the stent such that no substantial phase difference exists in the waves of the waved elements, and each of the waved connecting members has a plurality of waves including a wave formed in the clearance between adjacent annular expanding members and having an amplitude larger than that of the other wave, the largest wave included in each of said waved connecting members having a wave height measured circumferentially of the stent, the ridge or bottom of the waved

elements having a width measured circumferentially of the stent, the wave height of the largest wave included in each of said waved connecting members being larger than the width of the ridge or bottom of the waved element under the state that the stent possesses said first outer diameter;

wherein the plurality of waves comprising each waved connecting member includes a plurality of waves positioned between portions of a single one of the waved elements.

2. (Currently Amended) The stent according to claim 1, wherein the ~~ridges of the waved elements of the adjacent annular expanding members are connected to each other and the bottoms of the waved elements of the adjacent annular expanding members are connected to each other by the waved connecting members in respect of all the annular expanding members~~ each of the ridges of each waved element is connected to one of the ridges in the axially adjacent waved element by one of the waved connecting members, and each of the bottoms of each waved element is connected to one of the bottoms in the axially adjacent waved element by one of the waved connecting members.

3. (Original) The stent according to claim 1, wherein the width of each of said waved connecting members is not larger than 1/2 of the width of the waved element.

4. (Original) The stent according to claim 3, wherein the width of each of said waved connecting members falls within a range of between 0.03 mm and 0.08 mm.

5. (Canceled)

6. (Original) The stent according to claim 1, wherein the total length of said waved connecting member is at least 1.3 times as much as the straight distance between the ridges or between the bottoms of the waved elements of the adjacent annular expanding members.

7. (Original) The stent according to claim 1, wherein the width of the clearance between adjacent annular expanding members falls within a range of between 0.4 mm and 0.8 mm.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Previously Presented) The stent according to claim 1, wherein at least some of the waved connecting members have at least three waves.

17. (Currently Amended) A stent formed to be tubular as a whole, having a first outer diameter capable of insertion into a tubular lumen of a living body, and capable of expansion to have a second outer diameter larger than said first outer diameter upon radial outward expansion of the stent, comprising a plurality of annular expanding members arranged a predetermined distance apart from each other in an axial direction of the stent and each formed of a waved element, each of the waved elements comprising an alternating arrangement of ridges and bottoms so that each ridge is circumferentially followed by one of the bottoms, the plurality of annular expanding members including a first annular expanding member and a second annular expanding member, the first annular expanding member being immediately adjacent the second annular expanding member in the axial direction of the stent; and a plurality of waved connecting members connecting each of a plurality of the ridges of the wave element of the first annular expanding member to a respective one of the ridges of the wave element of the second annular expanding

member and connecting each of a plurality of the bottoms of the wave element of the first annular expanding member to a respective one of the bottoms of the wave element of the second annular expanding member ~~ridges and/or bottoms of the waved elements of the first and second annular expanding members~~; the waved element forming said first annular expanding member comprising a plurality of substantially linear segments, said first and second annular expanding members being arranged such that no substantial phase difference exists in waves of the waved elements forming the first and second annular expanding members, and each of the waved connecting members comprising a plurality of waves including a wave formed in the clearance between the first and second annular expanding members and having an amplitude larger than that of another wave of the waved connecting member, the largest wave included in each of said waved connecting members having a wave height measured circumferentially of the stent, the ridge or bottom of the waved elements having a width measured circumferentially of the stent, the wave height of the largest wave included in each of said waved connecting members being larger than the width of the ridge or bottom of the waved element under the state that the stent possesses said first outer diameter, the plurality of waves forming each of at least two of the waved connecting members including a plurality of waves positioned between the substantially linear segments of the first annular expanding member.

18. (Currently Amended) The stent according to claim 17, wherein ~~the ridges of the waved elements of the first and second annular expanding members are connected to each other by the waved connecting members, and the bottoms of~~

~~the waved elements of the first and second annular expanding members are connected to each other by the waved connecting members~~ each of the ridges of each waved element is connected to one of the ridges in the axially adjacent waved element by one of the waved connecting members, and each of the bottoms of each waved element is connected to one of the bottoms in the axially adjacent waved element by one of the waved connecting members.

19. (Currently Amended) The stent according to claim 17, wherein each of the ridges of the waved ~~elements~~ element of the first ~~and second~~ annular expanding ~~members are~~ member is connected to one of the ridges of the waved element of the second annular expanding member ~~each other by one of~~ the waved connecting members, and each of the bottoms of the waved ~~elements~~ element of the first and ~~second annular expanding members are~~ member is connected to one of the bottoms of the waved element of the second annular expanding member ~~each other by one~~ of the waved connecting members.

20. (Previously Presented) The stent according to claim 17, wherein the width of each of said waved connecting members is not larger than 1/2 of the width of the waved element.

21. (Previously Presented) The stent according to claim 17, wherein the width of each of said waved connecting members falls within a range of between 0.03 mm and 0.08 mm.

22. (Previously Presented) The stent according to claim 17, wherein the total length of said waved connecting member is at least 1.3 times as much as the straight distance between the ridges or between the bottoms of the waved elements of the first and second adjacent annular expanding members.

23. (Previously Presented) The stent according to claim 17, wherein the width of the clearance between adjacent annular expanding members falls within a range of between 0.4 mm and 0.8 mm.

24. (Previously Presented) The stent according to claim 17, wherein the plurality of annular expanding members also comprises a third annular expanding member immediately adjacent the second annular expanding member and spaced apart from the second annular expanding member in the axial direction of the stent, the third annular expanding member being formed of a waved element including a plurality of substantially linear segments, and a plurality of waved connecting members connecting ridges and/or bottoms of the waved elements of the second and third annular expanding members; a portion of the wave of at least two of the plurality of waved connecting members which connect the second and third annular expanding members being positioned between two of the substantially linear segments of the third annular expanding member.

25. (Previously Presented) The stent according to claim 17, wherein the waved element forming said second annular expanding member comprises a plurality of substantially linear segments, the plurality of annular expanding members

comprising a third annular expanding member immediately adjacent the second annular expanding member and spaced apart from the second annular expanding member in the axial direction of the stent, the third annular expanding member being formed of a waved element which includes a plurality of substantially linear segments, and a plurality of waved connecting members connecting ridges and/or bottoms of the waved elements of the second and third annular expanding members; a portion of the wave of several of the plurality of waved connecting members which connect the second and third annular expanding members being positioned between two of the substantially linear segments of the second annular expanding member, and a portion of the wave of several of the plurality of waved connecting members which connect the second and third annular expanding members being positioned between two of the substantially linear segments of the third annular expanding member.

26. (Currently Amended) A stent formed to be tubular as a whole, having a first outer diameter capable of insertion into a tubular lumen of a living body, and capable of expansion to have a second outer diameter larger than said first outer diameter upon radial outward expansion of the stent, comprising a plurality of annular expanding members arranged a predetermined distance apart from each other in an axial direction of the stent and each formed of a waved element, each of the waved elements comprising an alternating arrangement of ridges and bottoms so that each ridge is circumferentially followed by one of the bottoms, the plurality of annular expanding members including a first annular expanding member and a second annular expanding member, the first annular expanding member being

immediately adjacent the second annular expanding member in the axial direction of the stent; and a plurality of waved connecting members connecting each of a plurality of the ridges of the wave element of the first annular expanding member to a respective one of the ridges of the wave element of the second annular expanding member and connecting each of a plurality of the bottoms of the wave element of the first annular expanding member to a respective one of the bottoms of the wave element of the second annular expanding member ~~ridges and/or bottoms of the waved elements of the first and second annular expanding members~~; the waved element forming said first annular expanding member and the waved element forming said second annular expanding member comprising a plurality of substantially linear segments, said first and second annular expanding members being arranged such that no substantial phase difference exists in waves of the waved elements forming the first and second annular expanding members, and each of the waved connecting members comprising a plurality of waves including a wave formed in the clearance between the first and second annular expanding members and having an amplitude larger than that of another wave of the waved connecting member, the largest wave included in each of said waved connecting members having a wave height measured circumferentially of the stent, the ridge or bottom of the waved elements having a width measured circumferentially of the stent, the wave height of the largest wave included in each of said waved connecting members being larger than the width of the ridge or bottom of the waved element under the state that the stent possesses said first outer diameter, a portion of the wave of at least two of the plurality of waved connecting members being positioned between the substantially linear segments of the first annular expanding member, and the plurality

of waves forming each of at least two of the waved connecting members including a plurality of waves positioned between the substantially linear segments of the second annular expanding member.

27. (Currently Amended) The stent according to claim 26, wherein the ~~ridges of the waved elements of the first and second annular expanding members are connected to each other by the waved connecting members, and the bottoms of the waved elements of the first and second annular expanding members are connected to each other by the waved connecting members~~ each of the ridges of each waved element is connected to one of the ridges in the axially adjacent waved element by one of the waved connecting members, and each of the bottoms of each waved element is connected to one of the bottoms in the axially adjacent waved element by one of the waved connecting members.

28. (Currently Amended) The stent according to claim 26, wherein each of the ridges of the waved elements ~~element~~ of the first and second annular expanding members ~~are~~ member is connected to one of the ridges of the waved element of the second annular expanding member ~~each other by one of the waved connecting members, and each of the bottoms of the waved elements~~ element of the first and second annular expanding members ~~are~~ member is connected to one of the bottoms of the waved element of the second annular expanding member ~~each other by one of the waved connecting members.~~

29. (Previously Presented) The stent according to claim 26, wherein the width of each of said waved connecting members is not larger than $1/2$ of the width of the waved element.

30. (Previously Presented) The stent according to claim 26, wherein the width of each of said waved connecting members falls within a range of between 0.03 mm and 0.08 mm.

31. (New) The stent according to claim 1, wherein each of the waved elements comprises a plurality of linear segments, and each of the waved connecting members comprises first and second waves positioned in a clearance between adjacent linear segments and a third wave not positioned between the adjacent linear segments, the third wave being positioned between axially adjacent annular expanding members, the third wave possessing an amplitude larger than that of the first and second waves.

32. (New) The stent according to claim 17, wherein each of the waved elements comprises a plurality of linear segments, and wherein each of the annular expanding members is connected to an adjacent annular expanding member by a plurality of the waved connecting members so that each ridge of each annular expanding member is connected to one of the ridges of the axially adjacent annular expanding member by one of the waved connecting members and so that each bottom of each annular expanding member is connected to one of the bottoms of the axially adjacent annular expanding member by one of the waved connecting

members, each waved connecting member comprising first and second waves positioned in a clearance between adjacent linear segments and a third wave not positioned between the adjacent linear segments, the third wave being positioned between axially adjacent annular expanding members, the third wave possessing an amplitude larger than that of the first and second waves.

33. (New) The stent according to claim 26, wherein each of the waved elements comprises a plurality of linear segments, and wherein each of the annular expanding members is connected to an adjacent annular expanding member by a plurality of the waved connecting members so that each ridge of each annular expanding member is connected to one of the ridges of the axially adjacent annular expanding member by one of the waved connecting members and so that each bottom of each annular expanding member is connected to one of the bottoms of the axially adjacent annular expanding member by one of the waved connecting members, each waved connecting member comprising first and second waves positioned in a clearance between adjacent linear segments and a third wave not positioned between the adjacent linear segments, the third wave being positioned between axially adjacent annular expanding members, the third wave possessing an amplitude larger than that of the first and second waves.